24101-000/04/01 WELLA AG

2000.07.28 2000-U2013155(+2000DE-U2013155) (2000 10.12) AGIK

7/13 Oxidative color for keratinous fibers, especially human hair, contains developer-coupler combination with 2,5-diamino-(1'hydroxyalkyl)-benzene as developer C2001-000165

NOVELTY

Oxidative color for keratinous fibers, based on a developercoupler combination, contains 2.5-diamino-(1'-hydroxyalkyl)-benzene derivative(s) (I) or its physiologically tolerable suit as developer.

DETAILED DESCRIPTION

Oxidative color for keratinous fibers, based on a developercoupler combination, contains 2,5-diamino-(1'-hydroxyalkyl)-benzene derivative(s) of formula (I) or its physiologically tolerable salt as developer;

DE 20013155-UI DILLO-DOJ CLU-DI, 1-DTC, 1-DO, Bi A2, 26-A3, 26-C)

(1)

R = 1-6 carbon (C) linear or branched alkyl.

The color is used for coloring keratinous fibers and especially is a hair color (all claimed). It is useful for coloring e.g. wool, fur, feather and hair, especially human hair.

ADVANTAGE

DB 20013155-U+

Developer substances (I) have good physiological and toxicological properties, good storage stability and good coloring properties.

SPECIFIC COMPOUNDS

A total of 77 preferred couplers is cited, e.g. 2,6-diaminopyridine, 2,4-diamino-1-fluoro-5-methylbenzene, 2,4diaminophenoxy-acetic acid, 3-amino-phenol, 1-naphthol and 4- and 7-hydroxyindole.

A total of 37 other developer components is cited, e.g. 1,4diaminobenzene, N.N-bis-(B-hydroxyethyl)-p-phenylenediamine, 4amino-phenol. 2-dimethylamino-5-aminopyridine, 4,5-diamino-1benzyl-1H-pyrazole and tetrasminopyrimidine.

Specific examples of the coupler are 2.6-diamino-pyridine, 2.4diamino-1-fluoro-5-methylbenzene, 2,4-diaminophenoxy-acetic acid, 3-amino-phenol, 1-naphthol and 4- and 7-hydroxyindole.

EXAMPLE

A hair color contained 0.35 g 2.5-diamino-1-(1'-hydroxyethyl)benzene and 0.30 g 3-methyl-4-amino-phenol as developers, 0.18 g 1.3-dihydroxybenzene and 0.30 g 1-naphthol as couplers, 10.0 g pomssium oleate (8 % aqueous solution), 10.0 g ammonia (22 %

aqueous solution), 10.0 g ethanol, 0.3 g ascorbic acid and water to 100.0 g. 30 g solution were mixed with 30 g 6% aqueous hydrogen peroxide solution and applied to bleached hair. After 30 minutes at 40 °C, the hair was rinsed with water, washed with shampoo and dried. A red-brown color was obtained.

DEFINITIONS

Preferred Definitions:

R = (m)ethyl.

TECHNOLOGY FOCUS

Organic Chemistry - Preferred Composition: The color contains 0.005-20 wt.% (I) and 0.05-20 wt.% compler. It may also contain other developer(s) and/or direct dye(s). It is in the form of a hair color. Preparation: (I) can be synthesized by known methods, c.g. by hydrogenation of 1-[2-amino-5-(2-chlorophenyl)-phenyl]-ethanol or propanol over nickel to 2,5-diamino-1-(1'-hydroxy-ethyl or -propyl)benzene, as described in US 2273564, example 6. (26pp0016DwgNo.0/0)

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